JOB OFFER

Position in the project:	PhD Candidate
Scientific discipline:	Engineering and Technology: biomedical engineering, photonics
Job type (employment contract/stipend):	stipend
Number of job offers:	1
Remuneration/stipend amount/month *("X0 000 PLN of full remuneration cost, i.e. expected net salary at X 000 PLN"):*	4000 PLN
Position starts on:	01.07.2018
Maximum period of contract/stipend agreement:	16 months
Institution:	Photonics Engineering Division, Institute of Micromechanics and Photonics, Warsaw University of Technology, Warsaw
Project leader:	prof. Małgorzata Kujawińska
Project title:	*Project is carried out within the* **BiOpTo: Tomographic phase microscope for biomedical applications** *programme of the Foundation for Polish Science*
Project description:	The main goal of the project is to develop, test and prepare for commercialization (TRL7) a novel tool for quantitative 3D analysis of phase biological microobjects namely the tomographic phase microscope (TPM). TPM is working with projections acquired within a limited angular range, which are captured sequentially or through an innovative system of parallel projections. The system of computational imaging provides full processing path: from digital acquisition of investigated object's projections up to 3D visualization. The TPM supports such biomedical applications as histopathology, traceable measurement of cells and tissues, advanced therapy medicinal products for the treatment of osteoarthritis, cancer and cardiac diseases. In the course of the project, an initial business plan will be created in order to prepare the TPM for commercialization.
Key responsibilities include:	1. Optomechatronics design and participation in building of TPM working in static and dynamic mode. 2. Metrological analysis of TPM in both modes 3. Development of a software (front-end) for data capture and processing of data from optical tomography setup, including user interface that will meet expectation of medical and biological societies (GUI for demonstrator) 4. Participation in measurements and tomographic data analysis 5. Cooperation with other participants of the project in order to implement the numerical methods into experimental setups 6.
Profile of candidates/requirements:	1. Higher education degree with specialty in the field of optics, mechatronics or physics 2. Expertise in optical and optomechatronic design. Experimental skills 3. Good knowledge of Matlab/Python environment 4. Expertise in the field of optical measurement methods and phase retrieval 5. Very good knowledge of English (at least B2 level) confirmed by a certificate 6. Strong motivation for scientific work
Required documents:	1. Cover letter 2. CV 3. A transcript that includes grades from the last two years of the studies (or PhD studies) with the final grade from the studies. 4. Recommendation letter 5. List of publications and conference papers 6. Copy of the higher education degree diploma 7. Certificate of English
We offer:	Unique conditions for scientific research in innovative area of photonics.

European Funds Smart Growth
FNP Foundation for Polish Science
European Union European Regional Development Fund

Please submit the following documents to:	Electronically to zif@mchtr.pw.edu.pl, please write “PhD Candidate for BiOpTo” in the message title.
Application deadline:	11.06.2018
For more details about the position please visit (website/webpage address):	
Euraxess job/stipend offer (in case of PhD and postdoc positions):	Job Offer id: 304259

Please include in your offer:

“I hereby give consent for my personal data included in my application to be processed for the purposes of the recruitment process under the Personal Data Protection Act as of 29 August 1997, consolidated text: Journal of Laws 2016, item 922 as amended.”